

42033 - 12161

Ca 9

100 Sheets

3 in x 5 in

76 mm x 127 mm

No. 14011

0



Roaring Spring • Top Scholar—Roaring Spring, Pa. 16673

12033-1 Sept, 1986

W. Shoshone Co. Idaho

Mount St. Helens area

near Lake Shoshone

Wasatch Co., Utah

Open parkland with
scattered conifers

1100 m. alt.

3.2 km. W. of east of

Robert H. Meyer 2800 m.

1000 ft. N. 1000 ft. S. 1000 ft. E. 1000 ft. W.

Species: *Thermopsis* Plants

3-7 dm. tall, with

several to many slender
stems arising

from the base

and sprouting from the

base. Flowers 8-16

per head. ↓ V. 609

12033 contd.

Artemisia spiciformis Osterh.



Artemisia spiciformis (C)

2034. 1 Sept. 1986. AC,
Sherel Goodrich, Duane
McArthur, and Elizabeth
Ness. Duchesne Co., Utah.

Open slopes along the
West Fork of the Duchesne
River, 17 km. Northwest
of Tropic, Twp. 1 N.,
R. 9 W., S. 26. Menta

Special Meridian. Elev
2250m. Plants 4-10 dm.
tall, the inflorescences
standing above the
vegetative parts.

Flowers 3-7 per head.
Crushed leaves with a sweetish
camphor-like aroma.
Artemisia tridentata Nutt.

var. *vaseyana* (Rydb.) Boivin
art. trid vasey. (C)

12035 1 Sept 1986. AC,
Shaul Goodrich, Vincent
McArthur, and Elizabeth
Keese. Same place as 12034.

Scattered individuals in
a stand of *A. tridentata*
var. vaseyana

Plants 1.5-2.5 m. tall,
irregularly rounded,
the inflorescences not
notably surpassing the
vegetative parts. Flowers
5 per head, but blooming
later than *var. vaseyana*

Few apparent intermediates

Artemisia tridentata Nutt.
var. tridentata

Big ragwort (2)

12036 - 1 Sept. 1986. AC,
Sherel Goodrich, Durant
McArthur, and Elizabeth
Hesse. Open gentle slopes
at the lower edge of
the piñon-juniper zone
5 km. south of Tabiona.
Twp. 25., R. 7W., S. 17,
Uinta Special Meridian.
Elev. 2075 m. Plants
4-10 dm. tall. Heads
globose, with (3)4-5 flowers.

Artemisia tridentata Nutt.
var. *wyomingensis* (Boettl.) A. Young
Welsh



12037 - Sept. 1, 1986. AC,
Sheryl Goodrich, Durant
McArthur, & Elizabeth Neese
In thin pockets of soil
on flat sandstone rocks
at the lower edge of
the piñon-juniper
zone. Ca. 232 km. west
of Duchesne, Duchesne Co.
Utah. Elev. 2000 m.

Twp. 35., R. 8W., S. 23.
Uinta Special Meridian.
Rays 5-10, yellow. ✓

Helianthella microcephala
(A. Griseb. 1859)

Helianthella microcephala (6)

12038-1 Sept. 1986. AC,
Sherel Goodrich, Durant
McArthur, & Elizabeth
Hess. Wasatch Co., ~~Utah~~
Utah. Dry meadow-
sward in Strawberry
Valley, 35 km. southeast
of Heber City. Elev. 2300m.
Plants mostly 4-8 dm
tall. Flowers (8-) 10-13
per head.

Artemisia cana Pursh

Artemisia cana (6)

12039. 2 Sept. 1986. AC.

Sherel Goodrich, Durant McArthur,
Elizabeth Neese + Leila Shultz.

Juab Co., Utah. Sandy
places in sagebrush.

- rabbit brush communi-
ty ca 3 km south
of Yuba Dam, ca 45 km. airline
east of Delta. Twp. 17 S., R. 2 W.

Elev. ca 1600 m.

Rays 6-13, yellow. Disk
very dark.

Helianthella microcephala
(A. Gray) A. Gray

(5.)

Helianthella microcephala

120310 - 2 Sept. 1988 AC,
Sheryl Goodrich, Durant McArthur,
Elizabeth Neese + Leila Shultz
Jual Co., Utah.

Same place as 12039.

Flowers 3-5 per head.

Artemisia pygmaea
A. Gray



3-4
Artemisia (6)

12041-2 Sept. 1988. AC,
Sherel Goodrich, Durant McArthur,
Elizabeth Heese & Laila Shultz

Same place 12039.

Flowers 4-6, yellow at ~~the~~
first, soon fading nearly
white.

Chrysothamnus parryi
(A. Gray) Greene
var. *affinis* (A. Nels.)

3'

Chrysothamnus parryi (A. Gray) Greene
(7)

1700-2 Sept. 1986. AC,
Shorel Goodrich, ...
Arthur, Elizabeth Nees, &
Leila Shultz. Same place as
12037. Flowers 4 per head.

Chrysothamnus viscidiflorus
(Hook.) Nutt.
var. *peruvianus* (D. C. Eaton) Jepson

Ch. ... 4 fls
Ch. ...

12043 - 2 Sept. 1986 AC,
Sherel Goodrich, Duran McArthur,
Elizabeth Neeset Leila Shultz

Clay soil amidst sandstone
rock on open slope in
pinon-juniper zone.

~~Pavant~~ Pavant Range, ca 25
km. airline south of ^{15-11 more} Millard Co, Utah

Twp. 24 S, R. 4 $\frac{1}{2}$ W., S. 4.
Elev. ca. 1800 m.

Shrubs up to ca 4 dm tall.
Flowers 4-7 per head.

Artemisia arbuscula Nutt.

4-7 (6)
Art. arb.

12044 - 2 Sept. 1988

Same place as 12043 -

Heads yellow. Approximately 8.

Gutierrezia petradoria
(Welsh & Goodrich) Welsh

Gutierrezia ... ⑦ ⑧

120615 2 Sept 21, A. S. Sherel
Sordich, Durango Co., Elizabeth
Senior Co., Utah. On ^{Heese, &}
^{Lo, 1/2}
^{Sk 112}
phyllite outcrops in
ash-pine-juniper
zone along Grosventre,
16 km. due south of
Kanab. Twp 25 S.,
R. 5 W., S 35. Elev.
2200 m.
Comp. distinctively
gray, often nearly green.

Artemisia carruthii Wood

Ant. Carruthii (W.)

12046-3 Sept. 1986. AC Sherif
Goodrich, Elizabeth Neese, and Leila
Shultz. Millard Co., Utah.

Windblown sandy soil, in
Pine Valley, ca 65 km. w. of
of ~~mt~~ Milford, shortly west
of the Wa. Wa Mts. Temp. 24.5.
R 16 W., ca. S 29. Elev.
ca 1650 m. Densely branching
shrubs 6-12 dm. tall. Flowers
yellow (4) 5 per leaf
Achenes glabrous.

Chrysothamnus nauseosus (Pallas)
Britton
var. *turbidatus* (M.E. Jones) Blake

Chry. n. turbidatus ⑥

12047 - 3 Sept 1986 AC,
Sherel Goodrich, Elizabeth
Neese, Heila Shultz. Sandy
soil in Pine Valley, ca
65 km. west of Milford,
and shortly west of the
Wa Wa Mts, Millard Co., Utah.
Twp 25S, R. 16W. S. 4 or 6
Elev. 1600m.

Shrub 2-5 dm. tall.

Flowers yellow, 4 or 5 per
head.

Chrysothamnus Greenei (A. Gray)

E. L. Greene

Ch. Greene. (6) 2.5 dm

12648 - 3 Sept. 1976. AC,
Sherel Goodrich, Elizabeth Neese
and Leila Shultz.

Millard Co., Utah. In and
along a gravelly wash in
sandy ~~desert~~ desert. Pine Valley,
ca 65 km west of Milford, and
shortly west of the Wawa Mts.
T. 24S. R. 16W. S. 29

El. ca 1600' m.

Shrubs 6-20 dm. to El.
Flowers yellow, 4-6
per head.

Lepidospartum latissquamum
S. Wats.

Lepidospartum (?)

12649. A.C. 7 Sept. 1986
Ellis Is., Nevada. Gravelly northeast slopes
bordering the Salt Lake
Desert, ca 30 km. south
of Wendover, Wendover,
and 17 km. northwest
of Lake House Pass, Elev.
ca. 500 m. Twp. 30 North,
R. 70 East. Elev. ca. 1550 m.

Low shrubs, mostly 2-4 dm.
tall. Leaves shiny
yellow green

Artemisia nova A. Nels.

Artemisia nova (A.)

70.5
533

12050. AC 7 Sept 1986

White Pine Co., Nevada.

Gentle open west slope in
broad valley between the
Schell Creek Range and the
Egan range, ca 26 km.
north of McGill. Elev.

Twp. 21 North, R 6 & E.

Elev. ca. 1800 m.

Shrubs 4-12 dm. tall.

Artemisia tridentata.

Nutt.

var. *wyomingensis* (Beetle + A. Young)

Welsh

819.4

A. trid. wyom.

(6)

... ..
... ..
... .. openings
in heavily (quartz) slopes
at the north base ...

... .. of
... .. the
... ..
... .. 2 S.,
R. 2 E., S. 1.

... ..
... ..
... ..
... ..
#12050,

... ..

Artemisia arbuscula Nutt.
... ..

2052. A. v. 2051 north Yuma
22 September 1982 Same place

as 2051. Plants ca 6-10
dm. tall, flat topped,
with a sweetish,
camphor-like odor.

Growing with # 12051,
A. arbuscula, but
sharply distinct at
this point.

Artemisia tridentata Nutt.
var. *vaseyana* (Rydb.) Boivin

2033 23 April 87

Mountain, South Carolina
in the mountains near by
the mouth of Broad River,
Elev. ca 150m. ^{ca 33km west of} Winnsboro.

Plants colonial, with rather
short stems. Fragile
rhizomes as well as
perennial bulks, flowers
in white-purple.

Oxalis violacea L.

Oxalis violacea (2)

12051 A.C. L. - 26 April 1981

Marion Co., Florida

In oak-magnolia forest, Ocala
National Forest, Ca. 4

~~2~~ km. east of LYNN.

Erect slender ^{woody} shrubs

ca. 3 m. tall. Flowers white

Vaccinium arboreum Marsh.

✓✓

Vaccinium arboreum 4)

12055 - ACT Shen

Levy Co., Florida,

Under *Quercus laevis*

area on sand-hills

between Williston and Bronson,

about 1 km. east of Bronson

Bronson

Dense green shrubs

mostly *Quercus*.

Leaves small, dark green or

yellowish, smooth, glabrous,

shiny above, pale below.

Ceratiola ericoides Michx.

✓

Ceratiola ericoides

12056 - Shen L Crangairt
30 April, 1987.

Tyler Co. Tenn.

Under spruce-pine
woods along the high-
way.

Div. Ca 147 + 24

Sandy soil. Plants mostly single-stemmed and biennial, occasionally blooming a second time and then with 2 stems.

Bracts white. Corolla at first
pink, but soon becoming white
Flowers 27-37

35.4 at jct 56

Ind 100 ✓

5142.51

37m in. of fudge.

23.1

Hymenocera *Gottwein* (5)

12036. 22:22. 30 April 77
Pole ...
under of ... pine woods along
highway ... 37-38 km
east of Livingston, Elev.
CA. ~~1000~~ 1004 m.

Plant is ...
biennial ...
...
...
...
Flowers ...
...
white.

Hymenopappus ...
DC.
Hymenopappus (L.)

12057, May, 1959, 4-5 mi.
Polk Co., Oregon

In mixed oak pine woods
over looking ~~the~~ ~~lake~~
ca 1/2 km below Daisy Lake

Elev. ca. 400m.

Herbaceous or short perennial,
mostly simple & branched.

Leaves ...
beneath ... 20-55,
orange

Krigia biflora (Walter) ~~S.F. Blake~~

S.F. Blake

3323

Krigia biflora (C)

12058 Ac + Kaye + Thorne
4 June 1987. Millard Co., Utah.
Along the receding margin of
Scipio Lake, ca. 27 km. by road
(U.S. 50) northwest of Salina,
Sagebrush zone. Elev. 1800 m
Twp. 20 South, Range 2 West,
Section 2.

Utricularia vulgaris L.

Utricularia vulgaris (5)

12059. AC & Kaye H. Thorne.
9 June, 1987. Kane Co., Utah.

On rocky (sandstone) northeast
slope of Paria Canyon, ca. 2 km
southeast of old Paria, and 6.5
km. east of Kanab.

Township 41 South, Range
1 West, near the corner of
Sections 17, 18, 19, and 20.
Elev. ca. 1450 m.

Sagebrush zone. Unrooted
perennial, usually with
several stems. Flowers
rich pink. Type locality
of *Cirsium nidulum* M.E. Jones.
Cirsium arizonicum (A. Gray) Petráň

6. incl 3 sheet 1, 3 sheet 2. J. J. 3
Cirsium arizonicum

12060 AC & Kaye H. Thorne

9 June, 1987, Kane Co., Utah,

Same place as 12059

Rays 13-28, lavender,

(Do not write - typical of
of *Erigeron nidulatus*)

Erigeron utahensis A. Gray
var. *utahensis*



Erigeron utahensis (3) 6

12061 AC + Kaye H. Thorne.

9 June, 1987. Kane Co., Utah

Sandy clay floodplain of Paria
River, ca. 1+ km. southeast of
old Paria, and 65 km. east of
Kanab. Sagebrush zone.

Township 41 South, Range 1 West,
Section 18. Elev. ca. 1450 m.

Taprooted, many-stemmed
perennial. Heads yellow.

Rays 7-13.

Chrysopsis villosa (Pursh) Nutt
sens. lat,

Chrysopsis villosa

(3)

12062 - AC + Kaye H. Thorne.
9 June, 1987, Kane Co., Utah.
Same place as 12061.

Only one plant seen.
Flowers full purple.

Orobanche ludoviciana Nutt
var. *cooperi* (A. Gray) Beck



Orobanche ludoviciana (1)

12063. AC & Kaye H. Thorne,
10 June 1987. Juab Co., Utah

Gravelly roadside banks in the
sagebrush zone along Indian Hole
Highway 125, ca 38 km by
road south of Panguitch.

Sagebrush zone. →

Taprooted biennials up to 1.5 m.
tall, single-stemmed, Heads white
to pale lavender. Two heads
per plant. 174 and 255 flowers.

Township 10 South, Range 1 East,
Sec. 33.

Corolla throat longer than the lobes.

Cirsium neomexicanum A. Gray

(9, incl 3 sheet 1, 3 sheet 2, 3 sheet 3)

Cirsium ...

12064 24 Aug., 1987

A.C. + Eric F. Lamont

Rocky, bushy open slopes above
timberline on the north^{east} side
of Mt. Washington, Presidential
Range,

New Hampshire, shortly
above the 15 mile road to
the summit. Elev. ca. 1450 m
Part of an apparent hybrid
swarm between *B. glandulosa*

and a dwarf alpine form of
B. papyrifera

Plants ca. 1 m. tall.

Betula "X minor (Tuckerman) Fern."

Betula "minor" (1)

12065 20 Aug. 1957.

A.C. & E. J. E. Thompson

Same place as 12064.

Flowers 1 in tall.

Betula glandulosa Michx.
var. *glandulosa*

✓
✓

B. glandulosa

9)

12.
24 Aug. 1957,

Some
Plants ca 1 m. tall.

~~Betula~~

Part of an apparent hybrid
swarm between *B. glandulosa*
and a dwarf alpine phase of
B. papyrifera.

Betula "X minor (Tuckerman) Fern."

12067 Logan Co, Colo.

Shrubs along roadside
in prairie ca 19 km.

west of Steamboat

Single-stemmed, branched
annuals up to 1 m. tall,
with many pubes.

Bracts white, margins.

Petaloid appendages

(now missing from what
would be a symmetrically
disposed set of 5).

Euphorbia marginata Pursh

Cushart

12067

12068. 5 Sept 1967.

Grand Teton Natl.

Sandy slopes along the
Colorado River, ca 16 km.

upstream from the
road crossing just north
of Mead. Twp. 25 S, R. 22 E.

S. 4 E. E. 1/4 Sec. 12 S. 10 E.

1 yr. old annual, up to
1 m. tall, 10-20 plants
common. Leaves
very finely divided.
Petals white.

Lepidium latifolium

Lepidium (5) ✓

9618

17069 5 Sept. 1987. ~~Utah~~
Grand Co. Utah. Disturbed
granitic substrate along
the road on the north
end of the La Sal Mts.,
overlooking the upper end
of Castle Valley, ca 20 km
airline east of Moab.

Twp. 26 S., R. 24 E., ca. S. 5.
Elev. ca. 2300 m.

Perennial with several
loosely clustered stems,
spreading by creeping
roots. Flowers rather
pale lavender, some
petals white.

Mirabilis linearis (Pursh) Steiner!

mirabilis 3 7069 ✓

"2" 2 : 169087.

Leaves: 10-12069.

~~Perennial biennial up to~~

~~1.5 m. tall, freely branched~~
~~and many headed. The~~
~~stems are leafy.~~

~~Stems are leafy.~~

Heads \pm numerous, lavender-purple, disks shining
brown, 6-7 mm long,
resistant to wetting.

Perennial up to 1.5 m. tall, spreading
Creeping roots; stems branched

Cirsium trocyi (Rydb.) Petrak

(3 incl 1 not identified) (sheet 3)

12071 - 5 Sept 61, Los Angeles
Brushy area, slightly above
La Sal Mts., shortly north
of intersection of Hwy 265,
Hwy 14 E., ca. S.33.

Elev ca 2300m.

Range 17-23, 14-20 mm
long, light-colored
pappus.

Helianthus sp.

collected A. Gray

Oct 1961, 17-26, 5

12072 5 Sept 67.

^{Sagebrush}
~~Grand~~ Co., Utah meadows
at edge of spruce forest
on the west slope of the
La Sal Mts., ca 4 km. long
west side of Geyser Park.

Elev. ca 3000 m.

Plants up to 1.5 (or nearly
2) m tall, single stemmed,
evidently short-lived,
but no separate basal
rosettes seen. ~~Flowers~~
= stem erect, erect,
much shorter, ascending
Residual branches
Flowers white to pale

Cirsium scopulorum
(Greene) Cockerell

under

(4)

73 19

12073 5 Sept 1987

^{San Juan}
~~Grand~~ Co. Utah. Edges of
spruce forest on the west
slope of the La Sal Mts.,
ca 3 km. west of Hesper
Pass. Twp 27 S., R. 24 E.
Elev ca. 3000 m.

Senecio serra Hook.

var. *admirabilis* (Greene)

A. Nels.

✓

✓

✓

in

367

2074 - 6 Sept 1954.

~~Moab~~, Utah. Sandy
San Juan Co

desert slopes overlooking
~~Hotchkiss~~ to the south,
ca 45 km south of Moab.

Twp. 29 S, R. 23 E, S. 34.

Elev. ~~1700-1800 m~~. 1800m.

Shrub 1-1.5(-2) m. tall.

Flowers yellow.

Hook and Ladder Gulch

✓
Chrysothamnus nauseosus

(Pall. 1832), 72.

var. *graveolens* (Nutt.) H. M. Hall,

✓

Chrysothamnus

(5) 963

12075, 6 Sept 1987

~~Utah~~ Co., Utah

San Juan

Same place as 12074.

Annual, up to 1 (-1.5) m. tall.

Rays ~~yellow~~ ~~11-15 (-17) yellow~~

11-15 (-17) yellow, 2.5-3.5

cm long. Disk dark, with
a white-headed center.

Helianthus petiolaris Nutt.

(the fax phase)

H. petiolaris

(1)

12075 6 Sept. 1987,
Semi Peaks 12075,
Annual. Flowers 5-6,
pink-lavender.

Stephanomeria exigua
Nutt.

Stephanomeria exigua (5)

12677 6 Sept 87.

Same place as 12674.

Stems numerous, clustered
on a taproot. Rays

10-17 ~~mm~~ long, 10-14 mm long.

Chrysopsis villosa (Pursh) Nutt.,
sens. lat.

C. villosa

(5)

12078 6 Sept 1957.

Same place as 12074.

Plants up to 8 dm tall.

Rays 19-27, rich blue-lavender, varying to

sometimes pale blue-lavender.

10-14 mm long.

Machacaethra linearis
Greene

V

Machacaethra linearis (5)

12079. # 6 Sept 67.

near Juan Co. Utah
open, gravelly prairie
slope in aspen- spruce zone,
above the ridge pass
between Indian Creek
and Johnson Creek.

Cirsium centaureae (Rydb.)

K. Schum. (4) ✓

Abajo Mts, southwest of
Monticello, Co. Twp 34 S,
R 22 E.

Ell. ca 290 m. Perennial with
several stems together.
Sprouting in deep-seated
woody roots. Flowers
white.

12080- 7 Sept 1987
San Juan Co., Utah
Rocky sandstone slopes
and meadows in piñon-
-juniper community,
overlooking Burch Canyon,
7.5 km. by winding road
north of Junction with
Utah road 375, east of
National Bridge National
Monument. Twp 35 N., R. 18 E.

Elev. ca. 2100 m. Plants
herbaceous and colonial
Leaves glaucous Ray (8) 10-14,
very pale lavender, 8-11 mm long.
Aster glaucodes S. F. Blake

Aster glaucodes (5)

12081 - Sept. 11, 1957

Nye Co., Nevada.

Dry alkaline meadows
just east of Duckwater.

Trwp. ~~12~~ 11, R. 56E., S. 6. 7.

Elev. 1700 m.

Leaves 10-17, yellow,
7-10 mm long.

Haplopappus lanceolatus
(Hook.) Torr. & A. Gray

10-17
7-10
Haplopappus lanceolatus (5)

12082 Sept 11 1939

Ny Co. Ariz. Alcoholic dry
meadow just west of

Cochise. Temp. 13°.

R. $55\frac{1}{2}$ E., S. ~~30~~³¹ E.

1700 m. Tapered.

Biennial 2-3 ft. tall.

Flowers pink. ~~seeds~~ on
pink papery to nearly
~~white~~ white

Cirsium mohavense

(Greene) Petrak

3, incl 1 shot 1 shot 2 1 shot 3

Cirsium mohavense

12083 Sept 19, 1967
Mys Co., Mex.: same place
as 12082. Shrub up to
ca. 7 dm tall. Flowers
5, white. Involucral
bracts only poorly
aligned vertically

Chrysanthemum albidus
(M.E. Jones) Greene

✓
Chrys. (5)

12084 Sept 2, 1987

Mono Co. California

Basaltic cliffs and coarse

talus - km. easterly

5.

~~is a fine rock~~

~~(California 166) 2000~~

from ~~Western~~ Westgard

Pass ^{in part} along the California

road 166, south end of

the White Mts. Trap

Range

Elev. ca. 1950 m.

Haplopyxis

12084.

Sept 12, 1951

Tuxo

Mono Co., Calif.

In the cliffs and crevices

Taken in Paper Canyon,

ca 4 km. easterly

from Westgard Pass

along California road

168.

Twp. 7S., R 35 or 36E.

Elev. ca. 1950 m.

Freely branched, arborescent
shrubs up to ca. 1 m. tall.

Twigs glutinous. Leaves

punctate. Heads discoid,

yellow, with 20-25 flowers.

Haplopappus cuneatus A. Gray

(5)

209.1

7.6

12085. 10 July 1967.
Mesa Verde, open slopes
and meadows in the high
Mts. near the ^{Campito Meadows} ~~Paria~~ ^{Paria} ~~Plateau~~
Grave, on 33 km highway road
north of Westgard Pass.
Elev. ~~3200 m.~~ ^{3209 m.} Plants

several-stemmed from the
base, freely branched, up
to about 5 dm tall.

Twp. 35, R. ~~35E~~ 34E

Artemisia halliana Cronq.

✓

210.2
2315

Snowfield 1967

(7)

12086 - Sept 12, 1987

Mono Co., Calif. Same place
as 12085. A single shrub
growing with ~~the short-leaved~~
~~species "Artemisia"~~
~~sotherbyi~~ A. halliciana

Artemisia cana Pursh

✓

Artemisia cana (4)

12081 - Sept. 13, 1957
Mono Co., Calif. Open rocky
(granitic) slopes on *Pinus* *resinosa*

Shrub 0.6 m. tall
Lower ~~Sierra~~ ^{Tioga} Pass, west
of Lee Vining, in the
Sierra Nevada. Twp 1 N.,
R. 25 E., S. 30. Elev. 3000 m.
3-5 dm tall
Freely branching shrubs
with several slender
stems from the base.
Flowers ca. 8-13 per head

Artemisia rothrockii A. Gray

1 spec.

3-4 83

Artemisia rothrockii (5)

12088 - Sept. 13, 1987.
Mono Co., California.

Rocky flat with scattered
coniferous trees ca 2 km
~~west~~ by road easterly
from Saurra Pass in
the Sierra Nevada.

Twp. 22E., R. 5 N.

Elev. ca. 2700 m.

Freely branching shrubs
up to ca. 1 m tall

Artemisia cana Pursh

A. hololepis (5)

12089 - 15 Sept. 1987. Harney
Co., Oregon along seep
flaming spring area at
the southwest base of ~~the~~
~~Steens~~ Steens Mt.,
240 km. by road northwest
of Fields Trip. 35 S. R. 22 E.
S. 25 ^{1400 m.} Elev. ~~ca. 1200 m.~~

Tapered, single-stemmed
herbaceous mostly 1.2 m tall
shortly and narrowly
branched upwards, or
longer plants with some
larger ascending branches
lower. Further down, heads
small, other bracts.

Just south of the mouth
of Spring Creek

To next page

12039. Cn. alb.

Involucral bracts
with closely appressed,
yellowish leafy, a prominent
gray-white glutinous
dorsal ridge, and a
short abruptly
~~or~~ spreading-ascending
spine. Plants rather
soft for a thistle, with
hollow stem.

(3, incl 1 sheet 1, 1 sheet 2, 1 sheet 3)

Cirsium discolor

12089 - 13 Sept. 1987. Harvey
is. Oregon Along scarp
flaming spring area just
south of the mouth of
3-mile Canyon, ^{south west base of Steens Mt.,} 40 km. by road
west of Fields. Twp.
35 S., R 32 E., S. 25. Elev.
1400 m. Taprooted ~~single-stemmed~~
single-stemmed perennial,
mostly 1-2 m tall, shortly
and narrowly branched
upwards, or larger plants
also with a few larger
ascending branches from
farther down. Heads small,
abundant. Involucral
bracts with closely
↓ to next page

appressed, greenish leaf,
a prominent, gray, white,
glutinous dorsal ridge,
and a short, abruptly
spreading spine.
Flowers lavender-purple.
Plants hollow-stemmed
and rather soft for
a thistle.

Cirsium douglasii DC.

3, incl 1 sheet 1, 1 sheet 2,
1 sheet 3.
Cirsium douglasii

2070 - 19 Sept 1987.

Highland Co. Georgia north
of Atlanta on highway
Gentle, gradually ascending
ca 85' on highway south
of St. George, Idaho
Twp. 36 N, R. 11 W, S. 34
Elev. ¹⁶⁵⁰ ~~1600~~

Soft decid. shrubs ca. 4-6
feet tall. ~~13 to 20~~ 13 to 20 cc.
Invasive ~~as~~ ~~at~~ ~~the~~
Ramp ~~in~~ mostly 8,
11-12 mm long.

~~Monarda~~
Northern of Road 9 mi.

Senecio longilobus Benth.

2070

Senecio longilobus (6)

12091-19 Sept. 1951.

Michael Co., Arizona. With
scattered sagebrush and
juniper - juniper on rocky
(limestone) slopes, shortly
below the head of Pigeon
Canyon, Arizona Strip,
ca 120 km. by road south
of St. George, Utah.

Plants loosely colonial
low creeping rhizomes.

Tall ~~33~~³³ H, R. 12 W. S. ~~7~~ 7.

Alt. ca. 1700 m.

Artemisia carruthii A. Wood

30.3

Artemisia canch. (C)

12092 - 17 Sept 1987
Mohave Co., Arizona

Roadside in sagebrush

3000 ft. ¹³⁰ quartzite substrate,
ca 1/2 km W. road S. of
St. George, Utah, on the
road to Mt. ~~Dellenbaugh~~

Dellenbaugh ca 3.5 km.
south of the turn off to
Pigeon Canyon.

Tray 33 34 H. W.S. 4

Elev. ca 1700 m. ~~8310-85.~~

Perennial, spreading by
deep-seated creeping roots.

Plants stout but low,
only 2-6 dm. tall.

Flowers rich carmine to

almost crimson
to next fruit

Cirsium Ochrocentrum
A. Gray

✓

37.9

35.7

Cirsium

4 incl ~~as~~ 2 sheets 1,

2 sheets 2

-25 June 1985

USSR, Gorno-Altaysk

Autonomous Region, Foothills of
the ~~Altai~~ Altai Mts. ca. 50-60 km.
southwest of Gorno-Altaysk, in
the valley of the Sema River.
In dense, low, herbaceous
vegetation under scattered
fringe of Betula pendula.

Elev. 900 m.

Plants with slender stems
and white flowers

Cerastium pauciflorum Steven

Cerastium pauciflorum

12094. 25 June 1988

J. S. R. A. C. et al.

Same basic localities as

12093

Open, south-facing
Schistose cliffs or outcrops
at 700 m. elev. *Eutok
pendula* the dominant tree
in the area

Freely branching shrubs up to
ca 1 m. tall. Flowers white

Spiraea trilobata L.

Spiraea trilobata (2)

2095 - 2: June 1958.

~~to R. A. ...~~
A.C. et al.

Same place as 12094

Open, south-facing schistose
shales etc

Eritrichium rupestre
(Pallas) Bunge, sens. lat.
(*E. altaicum* M. Popov)

Eritrichium

1956 - 25 June 1958
1958, DC et al.

Same places 12095



Stellaropsis altaica
(Thieb.) Pobed.

Flower: pinkish in bud,
but the inside white
when open

Stellaropsis

Stellaropsis altaica

1200 - 25 June, 1988.

Same basic locality as 12095,
AC et al.

Open, south facing, schistose
slopes, Elev, 600m.

Stems clustered on a fibrous root system
base.

Dracocephalum ruyschianum
L.

12098 Dec 11 1952

Altai Gorno Altaysk

Indomontes region, Foothills

of the Altai Mts., ca 6500

Soils: Sand, gravel.

In woods (Betula) on

west-facing rocky (crystalline
igneous) slope overlooking the

Katyn River. 4500

near Choma

Springing of Katyn River

Springing of Katyn River

June, 1988. AC 1298.
SR. Same general place as
12098. In open cliff-ledges
on west-facing slope in
forest of *Betula pendula*
(some *Pinus sylvestris*).
Elev. 500 m.
Flowers bright yellow

Artemisia (2)

26 June 1988

AC et al. 4552

Same general place as

12-098 - open west -

facing rocky (schistose)

slopes.

Flowers large blue

Delphinium laxiflorum etc.

✓

12101 26 June, 1988 AC
et al. Same general
place as 12012. but in
moist, mossy places on
~~large~~ ledges along the
river valley.

Flowers white

Saxifraga sibirica L.

✓

... .. ⑦

~~12002~~ 12002 26 June

AC & Margarita Branova
USSR, Gorno-Altaysk
Autonomous Region,
Valley of the River
Kuba, ca 10 km south
of Chernal, and 75 km
south of Gorno-Altaysk,
Elev. 600 m.

Moist meadow near the
stream. Flowers
~~sky~~ sky-blue.

Myosotis caespitosa Schultz ✓

26 June, 1988

AC + Margarita R. ...

USSR, Gorno-Altaysk

Autonomous Region Foothills
of the Altai Mts, Open,
east-facing slope.

ca 14 km south of

Chernogolovsk, ca 20 km

South of Gorno-Altaysk

Valley of the River Kuba
Elev. 600 m.

Stems clustered on a ~~ter~~ short
rhizome-caudex, Flowers blue

Polemonium caeruleum L.

12/1/11 - 26 June 1911

11

same place as 12:03

Delphinium laxiflorum
DC.

1 26 June, 1985
25 04 01

Cotoneaster melanocarpus
Fischer

21

Quercus

2515103

Patrinia intermedia
(Hornem.) Roemer & Schultes

24th 27 June 1988.

AC et al. USSR Gorno-Altaysk

Autonomous Region Basin of

the River Sema, Shirok north of

TOPYCHAYA
TOPYCHAYA, ca 100km south-southeast
of Gorno-Altaysk

Altai Mts.

Visit, meteorological station

with stand of *Larix sibirica*
~~1200m~~ at 1200m elev.

Stems stemmed, fibrous-rooted
perennial Herbs yellow.

Roots ... sometimes
... ..

Ligularia glauca (L.) O. Holzm.

Ligularia altaica (3)

12008 27 Jan 1977

AC et al

Same place as 12027

Stem solitary or a short
rhizome or creeping. Flowers
pale yellow to white.

Geranium biflorum

12009 AC - 27 June 1933

USSR. Gorno Altaysk Autonomous
Region, Altai Mts. in the
basin of the Ulsul River, ca

120 km south southwest of Gorno Altaysk

Semi-open south slopes with
Larix sibirica 1350 m. elev.

Shrub, 1.5 m high. Flowers
white

Spiraea chamaedryfolia L.

(4) *Spiraea chamaedryfolia*
~~Siberica~~

28 June 89

12110- Ac et al. USSR

Same place ~~2009~~

12009

Stems ... on a compact,
fibrous-rooted base. Flowers
bright orange.

Trollius altaicus C.A. Meyer

Trollius (det. 4)

12111 AC Margarita Baranova
G. P. K. - Gorno-Altaysk
Altai Mountains - Altai
Mts shortly east of Yedigen
and ca 130 km south-southwest
of Gorno-Altaysk,
Climbing over spruce on
just north of a
saddle pass between the
Charyshsk and Ursul
River basins. Terns 4,
white 28 June 1986
Elev. ca 1600m

Clematis sibirica (L.) Miller

Clematis sibirica (L.) Miller

12112 ACT Marasilla Barro Colorado

28 June 1985 On an open,
west-facing slope with dense,
low, herbaceous vegetation,

~~Larix laricina~~ sibirica the
dominant tree nearby.

2-3 km north of a major pass
- etc as in 12111.

Elev. ca 1700m.

Rays 36-58 (8 counts),
blue-lavender.

Yabogan Pass

Aster alpinus L.

3:00

Aster alpinus (3)

12/13 Act Margarita Barrios
28 June 1980. Same place as
12/12

Elev. ca 1700m.

Stems solitary on a short,
fibrous-rooted crown or
caudex. Leaves glaucous.
Filaments bright white,
narrowly petaloid

Thalictrum petaloideum

Thalictrum

petaloideum

(3)

12114 - 29 June, 1958

Altay Mts. USSR, Gorno-Altay

Altaysk Autonomous Region

Open meadow, ca 3 km

east of Yabagay Pass,

Altai Mts. ca 130 km

South-southwest of Gorno-Altaysk

Elev. 1300 m.

Freely bran. glaucous, rather
brittle, stems, ca 15 cm high.
Flowers white.

~~Very common in meadows~~

Sibiraea altaiensis (Laxm.)
Schneider ✓

1360 m

Sibiraea altaiensis

12115 29 June, 1988 AC &
Margaret Brown USSR
Gorno-Altaysk Autonomous
Region. Altai Mts
shortly southeast of Khabarovka,
and ca 130 km south of
Gorno-Altaysk.

Dry, open south slope,
amongst granitoid rocks
Flowers pink-lavender

Goniolimon speciosum
(L.) Boiss. ✓

Goniolimon speciosum Ⓒ

1216 20 June 1968

Act. Margarita Baranova.

Same place as 1215, but west slope.

Plant spreading by slender rhizomes. Flowers light greenish yellow.

Galium coriaceum Bunge



Galium coriaceum

1217-29 June, 1958 AC &
Margareta Barneby

Same place as 1215 - but
Open, granitic slopes
~~[no direction]~~.
Flowers lavender

Phlomis tuberosa L.


~~Flowers lavender~~

Phlomis tuberosa (3)

12118- 29 June, 1953 H. L. +
Margarita Baranova
same place as 12116

Flowers rich blue

Campanula sibirica L.

Campanula sibirica L. 

12119- 30 June 1988, Alt
Manshit Garam, USSR
Gorno Altaysk Autonomous
Region. Altai Mts. 1200m,
elev. Semi-open places, with
barren siltstone and granitoid
rocks shortly southeast of
Khabarovka, and ca. 130km
west of Gorno Altaysk
Stems clustered, erect.
Flowers ochroleucous, almost
white.

Astragalus follicularis
Pallas

Astragalus

12120 23 June 1908

45 ft. Mo. J. J. H. H.
Same place as 12119.

Flowers bright pink
lavender

Centauria sibirica L.

1

✓

1,

12121 - 30 June 1989.

San Margarita Island

Same place as 12117.

Flowers sky-blue.

Eritrichium rupestre

(Pallas) Bunge, sens. lat.

(*M. subrupestre* M. Popov)

✓

Erigeron (3)

12122-30 June, 1968.

AC + Margarita Baranova

Open, well exposed

1100 m. ...

same ... 1200.

Leontopodium ochroleucum

Beauv.

var. *campestre* (Ledeb.) G. Schubert

Leontopodium ⑥ 1717

12123-30, June, 1958. 1. 1.

USSR, Gorno-Altai Prov.

Altai Mountains

Overlooking the Katun River,

160 km south of

Gorno-Altaysk, Altai Mts.

Sandy, gravelly, open hillside.

Altitude 7000.

Open, bushy, spring

shrubs 2 m tall.

Flowers yellow.

Caragana pygmaea (L.) DC.

Caragana pygmaea

(1)

12124 - 30 June, 1933 AC

et al. in SSK. Gorno Altaya
Autonomous Region, Altaya
Prov. 16 km. South of ...
Elev. - 3,500 m.

...
... the kation
... Rays ca 18-30,
... border

Heteropappus altaicus
(Willd.) Novopokr.

12-304

Heteropappus ... ✓

12135 - June 17

Margarita Baranova.

USSR, Gorno-Altaysk Autono-

mous Region, Zaysan, 1951,

Altai Mountains, Gorno-

Katusk River, Altai Mts

ca. 1200 m. alt. Gorno-

Altaysk Elev. ca 6000

Goldenstedtia

Margarita Baranova

✓

(2)

1972, July 1, 1980 AC &

Margarita B. ...

Gorno-Altaysk Autonomous

Region, Altai Mts. Stony.

a narrow ridge between the

Katun and Chuya Rivers ca

160 ~~km~~ km. south of Gorno

-Altaysk. Elev. ca. 6000

Flowers bright lavender

purple.

Scutellaria grandiflora Sims

Scutellaria grandiflora Sims
~~(Scutellaria grandiflora)~~

12127. Vulpes vulpes 42 mm
Marginalia

Stomach contents, but all

belong to the same white,
with a few small, dark, acidic

Convolutus ammanni Desr.

Convolutus (3)

12,28 1 July, 1958

A. Margarita B. ...
USSR - Gorno-Altaysk Auto-
nomous Region, Altai Mts.
ca. 160 km. south of Gorno-
Altaysk. Loose, stony, sandy
alluvial slopes just between
the Katun and Chuya Rivers.
Elev. ca. 600 m. Flowers
blue

Polygala tenuifolia
Willd.

✓

blue

Polygala tenuifolia (L.) Willd.

12129 - 1 July, 1988
Margovitsa River, USSR

Gorno-Altaysk Autonomous
Region. Altai Mts. ca 8 km
South of Gorno-Altaysk.
Elev. ca 1000 m.

In the shade of scattered
Betula microphylla small
trees on west slope overlooking
the Chuja River. Rays
18-33 (6 counts) blue-
-white.

ca 30 km above its junction
with the Katun River.

Aster alpinus L.

Aster alpinus (L.)

12130 - 3 July, 1988

USDA Forest Service
Elmer E. Rusk
Oakland, California

1000m

Several
confined to the bottom
Single-stemmed flower
stems
short,
slender

Ay-Gulak River

Veronica
Paul

...

12131. 2 July 1968
Mangalia B. ...
USSR - Gorno Altaysk Auto.
nomous region, ~~ca~~ km south
of Gorno Altaysk.

Ulagunsky PAS
Moist forest lining lime-
stone etc. ...
Park. I collected large at
the Altai Mts. Elev. ca. 1825 m.
Flowers pink to red
to white.
... officinalis L. ✓
... ✓
Valeriana officinalis

12, 72 1000 088

A - Margarita Barahona

km south of Gorno-
Aitavsk

Mossy, sun-driest meadow in
Igarka Park, Igarka
Range of the Altai Mts.
Elev. ca. 1875 m. Flowers
~~white~~ white. Anthers 2
plumbeous with the odor of vanilla

Lagotis integrifolia (Willd.)

Schischkin

Lagotis integrifolia (3)

12133 - 2 Jul 1988 ACL
Marguerite Barrera

Same place as 12132.
Branching shrub 3-4 dm tall

Salix caesia Vill.



Salix caesia

12134 - 2 July 1950

Mammoth Basin, USSR

Great Altai Mountains

10 mi. Altai Mts, ~~ca~~ km

Great Altai Mts.

Edge of Forest near

Sorulukel Lake, Igarka

Range. Elev. ca. 1850m.

~~Sorulukel Lake~~

plants forming mats as in

Antennaria dioica Staminate

corolla white, petals

pinkish

Antennaria dioica (L.)

✓ G. 11.

✓ 1850m.

Antennaria dioica

12155 8 July 1958. AC. 1112.
Gorn' Altaysk Autonomous Region
Altai Mts. ca 160 km south of
Gorn' Altaysk. Elev. ca 2500.

Rocky slopes, some at slope
below open talus.

Tree 2-3 m high, 10-15 cm

diameter, 2-3 m high, 10-15 cm
covering the slope.

Small shrubs, 1-2 m high.
The upper part of the

Betula rotundifolia Spach

Betula rotundifolia Spach

1212: 2. 12. 1935. 1213
USSR, Same place as 1212

Forming loose tufts
smaller than ~~the~~ schistose
folios, ...
... Flowers sort
yellow. ...

Biebersteinia odora ~~Steph.~~
Stephan

Biebersteinia (3)

12137 = 3 July, 1988 ALE

Same basic place as 12135.

Forming low mats on meadow-

-like schistose slopes ~~to~~

below south-facing talus.

Others erect.

Salix rectijulis Ledeb.

Salix "rectijulis" (3)

1935 & 3 July 1936
et al. USSR. Gorno-
Altai, K. Altai Region -
Altai Mts., ca. 1600 m.
South-southeast of Gorno-
Altai and Shunkh
Aktash. Elevation

On open, rocky slopes above
timberline. Stems solitary or
sometimes 2 or 3 together.
Heads numerous in umbels,
the rays turning yellow or orange-
red with age.
Rays 13, or up to 24.

Senecio cumbalensis Pursh

Senecio cumbalensis (Pursh)

12139-3 July 1988, Altai Mts.

SSR, Gorno-Altai Republic

Region Altai Mts., ca 160 km
south-southeast of Gorno.

Altitude, ca directly north of
Aktash. Elev. ca. 2000m

Open slopes ~~and~~ in a canyon
a little above the stream.

Macropodium nivale (Pallas)

R.Br.

Macropodium nivale

1 12139^a July, 1951

ACT Margarita Borealis

USA Gorno-Altaysk

Autonomous Region.

Altai Mts. southern slopes

south of Gorno-Altaysk,
about 40 km north of Ak Tash.
Elevation 2600 m.

Open, rocky slopes in the
valley, well above
the forest line. Stems creeping
along the ground.

Salix reticulata Ledeb.

Salix

(2)

1240 - June 8, 1958 - C. C. Kanan.
Barro Colorado.

Same place as 12139.

Flowers deep blue.

Corydalis pauciflora
(Steph.) Pers.

Corydalis pauciflora

12.01 - 4 July, 1988 ACT
Margarita Baranov.

USSR Gorno-Altaysk

Autonomous Region, Altai
Mts, ca 160 km south-southwest
of Gorno-Altaysk and shortly
north of Aktyash. Elev.
ca. 2000 m.

with *Larix sibirica* and *Pinus
sibirica* on southwest slope

Shrub in clustered stands
ca 4 m tall.

Salix jenisseensis (F. Schmidt)
Flowers

Salix jenisseensis

12142. 4 July, 1988. AC
Same place as 12141

Lax shrubs ca 1.5 m. tall

Lonicera caerulea L.

Lonicera (?) *caerulea* (2)

243 H. 111
Scorzonera
244, Flowers yellow.

Scorzonera radiata
Fischer

✓

12144 4 July, 1938 Alt
Margarita Baranova

Same place as 12141

A. b. ... several stemmed
... young
leaves with a reddish tint

pyrolaeifolia Ledeb.

Salix pyrolaeifolia A.

1214: 4 July, 1955

Ac & Margarita Baranova

2500' 2000' Altitude

2500' 2000' Altitude

Elm ca 2050m

North slope, under *Larix*
Sibirica and *Pinus sibirica*

Common but rare

Pyrola asarifolia Michx.



Pyrola ...

12 JUL - 5 July, 1988 AC,
Mongolia Bay (1988),
Gorno-Altaysk Autonomous
Region, Altai Mts.

...

To ... day, ...
grazed meadow along the Chuya
River ... west of Alt
... ca 160 km ...
... of ...

Flowers lavender.

Astragalus ...
...
... (2)

Astragalus ...
...

12147 - 5 July, 1988
A. Margarita B. ...
USSR - Gorno-Altaysk
Autonomous Region.

... 130 km S. ...
...
... a few km. West of
Aktash. Steep, south facing
scree ...
...
... 1200 m.

Lagopsis ...
(5 ... km. alt.

✓

1200 m scree

...
...
...

12148 - 5 July, 1955, Allen
USSR Gorno-Altaysk Auton-
omous Region, Altai Mts ca
160 km south-southeast of
Gorno-Altaysk and a few
km. west of Aktash, Elev.
ca. 1400 m.

In dense herbaceous and
low-shrubby vegetation on
west slope of a canyon.
Stems solitary from a
fibrous-rooted crown. Leaves
glaucous. Rays yellow (4) 5 (6)
Elev. 1400 m.

Ligularia altaica DC

Ligularia

12149 - 5 July, 1985. A. C. &
Margarita Baranova USSR
Gorno-Altaysk Autonomous
Region, Altai Mts. ca
160 km. south-southeast
of Gorno-Altaysk.

Steep, loose, scree facing
schistose slope overlooking
the Chuya River, a few km
west of Altash.

Flowers blue-purple.

Collected 10 Dec. 1985.

Orobanche caesia Reichenb.

Fl. blue-purple. ✓

Orobanche caesia Reichenb.

12150 6 July, 1988 AC

USSR, Gorno-Altaysk

Autonomous Region.

Altai Mts. ca 160 km south of
Gorno-Altaysk. Drainage of
the Katun River, a few km
southeast of Kupchegen.

Open, steppe like south
slope. Elev. 1100 m

Artemisia campestris L.

subsp. *borealis* (Pallas) H.M. Hall
+ Clements

✓

Artemisia "borealis" (3)

12151 July 12 96

Same place as 12150

Flowers white

occasional stems

...ding.

Astragalus pycnanthus
Ledebour

✓

Astragalus ^{*delicatulus*}
...

12152 7/11/1952
+ al. USSR Gorno-Altaysk

Autonomous Region, Altai
Mts ca 90 km south-southwest
of Gorno-Altaysk, along
Sena River, ca

far north of Altaysk
pass. Plant on steep slope
with scattered shrubs.
Elev. ca 1500 m.

Fls. Pink-lavender

Bergenia crassifolia (L.)
Fritsch.

1952-1953
F. 12152

12153 7.1.1951
SR Forest
Autonomous Region
Same place
Lax shrubs ca 2-3 dm.
Same place as 12151.

Vaccinium myrtillus L.

7.1.14 1938 A.C. 6
Same place as 12 132.

Flowers sky blue.

Myosotis silvatica Hultén,
sens. lat.
(*M. krylovii* Serg.)

12156- 8 Jan 1988

A. C. J. Margarita Baranova
USSR - Gorno-Altaysk

Autonomous Region.

Altai Mts. near Cherga,
ca. 50 km southwest of
Gorno-Altaysk.

Open, rocky hillside
overlooking the Sema River.
Elev. ca. 500 m.

Flowers dark blue

Delphinium laxiflorum DC.

✓

Delphinium (3)

12157 9 July, 1988 AC

USSR Gorno Altay

Altay Mountains, Gorno

Altay, 100 km southwest of

Gorno-Altaysk.

Gypsophila patrini Ser.

On south-facing
sculptured cliffs, ~~ca. 15 km~~
0.5

Plants habit shrubby at 1 m.

Base of plants light

pink to red

Gypsophila patrini

12154 - 9 July, 1958 CMB

USSR, Gorno-Altaysk
Autonomous Region. ^{Altai} mts.

Pass at top of the Anziskiy

Range - ca. 100 km southwest
of Gorno-Altaysk

Anziskiy Range Elev.
1300 m.

Plants forming loose mats.

♂ bracts white

♀ bracts pinkish

Tufted ridge-tops in local

s. *Antennaria dioica* (L.) Gaertn.

Antennaria dioica (L.)
Gaertn.

Ant *dioica* (7) ✓

12159 - 9 July 1988 ACJ
M. G. de Baranova. 9 July 1988
Gorno-Altaysk Autonomous
Region, Altai Mts ca
100 km southeast of
Gorno-Altaysk.

Open rocky (limestone)
but well vegetated meadow
on the west side of the
Annisky Range.

Thinly nodding rooted,
white with a trace of
yellowish or greenish.

Drainage on the Annisky Range.
Larix sibirica the dominant tree.

Onosma simplicissimum L.

Onosma simplicissimum L.

USSR, Tadzhikistan

Gorno-Altaysk Autonomous Region - Altai Mts. ca 1200 m.

Altayee, ^{west} side of the
Leyla River, on the west side of the
Altay Range. Elevation 800
m. Flowers yellow.
near the River
beds.

Hypochaeris maculata L.

Hypochaeris *maculata* L.

Asplenium

12161 - 10 July 1988. 2
Gorno-Altaysk Autonomous
Region, USSR Low meadow
along the Sema River,
near Cherga, ca 45 km
southwest of Gorno-
Altaysk. Elev. ca 2150 m.
Shrubs ca 1-1.5 m. tall.
Flowers pink-lavender.

Myricaria alopecuroides
Schrenk.

Myricaria alopecuroides Schrenk.

Brittania 85 → for A7
Pleasiperna for AT

Swollen & Gabrielian
both need incubation
as formal participation.

Better if Utah can
reincorporate from
NY. As well as
handle Museum → NY
and expenses in Utah

In the *Taraxacum*
ceratophorum group,
the scape arises laterally
instead of in the center of
the rosette

39437 at L... 20 44 AM

39540 at S.L.C 21 Sept 54

40018 at L... 21

40475 at Laramie 23 AM

40708 at Kennesaw Colo. 24 AM

41255 at L... 25 AM

41930 at S. Toledo 26 AM

41495 at L... 27 AM

33-34 days: Machaeranthera
2400 ft. - Col.

undulate undulate
9 or 10 in form, the 9 or
evident but not strong.
spines to 7 or 8 mm.

Flowers rich carmine
pink. 1 triple type

5 mm ⁴⁺ 39.12
corolla 32 mm ¹²
deepest sepals 13.5 mm
innermost 14 mm

9

stamens 34.1, 34.9

etc. nearly 10 mm.

mean length 35.3

10 or 12 mm long

10 or 12

athena : 1730000000
 brown 78 ...
 the balance of the

$$\begin{array}{r}
 511 \\
 \hline
 9679
 \end{array}
 \quad
 \begin{array}{r}
 5 \\
 \hline
 2L + 8
 \end{array}$$



Thistle

34 N, 12 W, S. 32

Take road on to Mt. Trem

Trembuck, but right turn
(west) in main street
valley just south of
Diamond Butte

Aug. 1908

rather

light brown, pale to white
definitely creeping below
ground - colonial only
3-8 stalks in a ca 3, 3.5
cm high, 2 cm thick culm.
- plant withers because
25+ cm thick.

~~3000~~

1.5-6
—
2
2
2
63

3937

At 11:00 am going
a good road leading to
river mouth in park,
the water is very
high and the bridge
is very narrow.
The river is probably
12 ft. S. Spectacular

My file is 62 miles (100 mi.)
is 62 miles (100 mi.)
St George, at 5900' (1800-m.)
in 35 N. 12 W. 4 S. 28

Airplane? ... Rd
...
along ...
...
25-30 miles to get ...
... Tent Creek
Road ... BLM 4118
... 13 miles to get ...
... Road.
...
...
... miles.

...
...
...

g. squarrosa 44, 52 mg

Habenaria laevis

22, 25, 41 mm

Colorado Flora: western slope

W. A. Weber

Colorado Associated Univ. Press

Boulder Colo. 1987

13.2 1000 ft
06.9 1000 ft

503 734 4106

2

June 18 -

Se Malheur - Little
emphatic River - Little
Mc Dermitt

40 S, 46 E 5.1³

East of Anderson
Crossing of Little (11)
common along edged
intermittent streams
lichens comm.

in 1915

3688718 - Canyon

37140 - Tampala 11 Sept

127 Goldfield

14118 J. L. H. 21.6

37289 Berthys - 12-18 Sept.

57521 1915 14.26

531.25 1915 4950

37772 - 1915 14.17

168.7 1915 46.1

38289 - 1915 16

241.4 1915 16

38414 - 1915 17

38806 - 1915 18

35682 at Meab. -

enc. 1 4 Sept. Friday

35.22 netting

Net

4 Sept

Net

Net

ca 10,500

734.9 Geiger Fiss

37.2 Goldmine

40.52 " " "

30 " " " " " " "

Net

802.0 " " " " "

801.6 " " " " "

35670.2 at 8:30

Sterling Keeley

213- 7114- 3378

~~623~~ 693 0771 - 4123

AM 7:30-8:00

255 1111 7/11 7PM

908.0 jet 7 dept

382 2nd floor jet

36104 Green point

36340 S.L.C.

26000 1st floor

36710 - W. 1st floor

Pasture Las Américas
three compound-

323951

327112

33132

3

1:40

2:10

4641

Graph

1:30 4:15

3-126

1:30 4:15

to-day
is called Realty
Mississippi

P. alba. Large, surface of
leaves covered
with a thin, loose, white
fleece of mostly stellate
trichomes. Petals
pale yellow

July 1, 1920

at the University of Mississippi
Oxford, Mississippi

Peckham, ex impetibus
serological studies on
Rhamnaceae, Celastraceae,
Hydrangeae, & Grossula-
raceae. Whymoth?

p. 233 of ms

(912). 9017. 1915

SA. 11/11/15. 100. 20. 100. 100

100. 100. 100

The quantity of
Q. 100. 100. 100. 100.
100. 100. 100. 100.
100. 100. 100. 100.

100. 100. 100. 100.
100. 100. 100. 100.
100. 100. 100. 100.
100. 100. 100. 100.
100. 100. 100. 100.

Sampled first night
1000 ft. below - 1000 ft.
below

on 165 - first
road on right
1 mile N. across again
then at Brookline & RR.
Porter Co. then
red light Woodlawn -
Missouri - then west
red light Midway
Road - turn right
1. pretty black -

Q. missouriensis

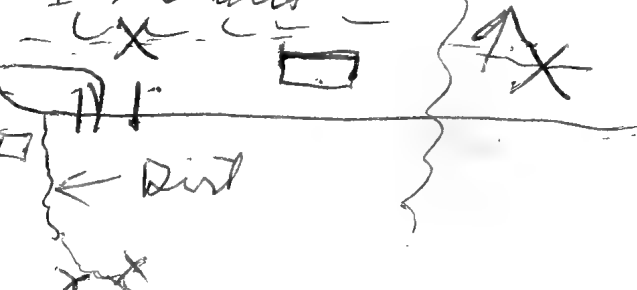
I. 1. 11

Take note *Arundinaria* to 10m.
Vicia tetrasperma with
4 or 5 seeds.

Lexington - left front,
Q. ogle - east side

Q. to mississippiensis
→ Lytle → marquette
lowlands of So. & West

Lexington - Buffalo Creek
± 3-6 miles



Leucodermis marked
trunk, usually in 1 or 2 rows
leaves hairy, glaucous
beneath - bark
smooth

flowers in clusters
leaves hairy, glaucous
beneath - bark
smooth

Elaphoglossum ...

Symplocos tinctoria L.

Puberulent beneath - fls yellowish
- lower clusters fls with green

~~Laphemia intricata Beutelsch~~
~~Sub Perilla~~

~~Chaenactis personii Jeps.~~
~~Sub C. eriphostoma~~

~~Palafoxia linearis a. gigantea~~
M.E. Junc. Nit found

213-825 5619

Warren.

3.1.1944. (Cousins
arrived in 1944)

5.1.1944

3.1.1944

under. under. 1944
an. 1944. 1944. 1944.

1944. 1944. 1944.
1944. 1944. 1944.

1944. 1944. 1944.
1944. 1944. 1944.
1944. 1944. 1944.

~~Lomatium~~

~~sub L. frigidum~~

Lomat. frigidum, sub primitivum

~~Lomatium~~

~~sub Lomatium~~

Pousser dans les alpages

sub Lomatium

Wetland scabra, attractiva

~~terreux, sejourne dans les~~

~~sub Lomatium~~

L. nobile frigidum - induratum

Parthenium alpinum & ligulatum

Hemizonia - purpurea

Scilla - alba

~~Halsburya~~

Barleya - verna

~~Barleya - verna~~

Oenothera *eximia* sub

caespitosa - to seek at G.H.

Cornus sericea var. *occidentalis*
to seek at G.H.

Euphorbia *resinosa* common.

~~sub. Psittaculopsis *balani* at PHM~~

Junonia *dysodonta* Jones

sub. *Periclyptera* *aurata*

Laphamia *pallens* var. *texensis*

MC Jones sub. *Periclyptera*

~~Laphamia *gracilis* MC J.~~

~~sub. *Periclyptera*~~

~~Laphamia *fastigiata* Jones~~

~~sub. *Periclyptera* *gracilis*~~

Laphamia *congesta* MC Jones.

sub. *Periclyptera*

Denothura exilis Mac...
Soc. Commission ex

Oenothera ...
sub. ...

~~*Oe minor* ... Mac...~~
~~Soc. Commission~~

~~*Sphaerostigma hallii* ...~~
~~Soc. Commission ...~~

~~*Oenothera ...*~~
~~sub. ...~~

~~*Oe dentata* var. ...~~
~~sub. ...~~

~~*G. ...*~~
~~...~~

G. ...
Anyophytum ...
G. ...

...

~~D. ...~~
~~sub ...~~

~~Euphorbia ...~~
~~sub ...~~

~~Lingua ...~~
~~sub ...~~

~~Athen ...~~

~~... ment ...~~
~~sub ...~~

~~Podiceps ...~~
~~sub ...~~

~~Aletes ...~~
~~sub ...~~

~~Cymopterus ...~~
~~sub ...~~

~~Cogswellia ...~~
~~sub ...~~

Epilobium brevistylum

sub. glandulosum

Epilobium watsonii

sub ciliatum

Epilobium glaberrimum (H.B.K.)

Zauschneria ciliata

~~*Ge. caespitosa var. prostrata*~~

~~*Ge. canis*~~

Ge. dettoides var. *pipen* f. *glabrata* H.B.K.

Ge. trichocalyx f. *caerulea*

~~*Ge. californica* ssp. *californica*~~

Ge. confertiflora

sub. *canis* *brevipes*

~~*Ge. scopoides* var. *laetiflora*~~

~~sub. *canis* *walkerii*~~

~~*Ge. laetiflora* ssp. *californica*~~

4 - Plants usually
not flat topped;
standard sagittate
lower lvs,
" ~~not~~ *wyomingensis*

7-40

117.

202.1 . Lv Reno

301.5

1. Succulent essentially
glossous (except sometimes
the outermost bracts,
shining yellow-green;
leaves minutely green dotted
in the tomentum; plants
typically small 2-4 dm,
with a narrow inf.,
but sometimes 6 to 7+
dm and with somewhat
broader inf. P. n. n. 4.

1. Succulent + tomentose,
mostly erect; leaves
scarcely dotted with
green dots.

Sept. 10. To ? a place
with house
1896

452 6366

—

Stebbins 1957
self. p

Self p is necessary.

2 unusual areas,
derived from a northern
sp. One "large-bed"
region to the N, the other
mid to small bed - flat area.

82 8. 4. 1951

88 5 1st 53

165 spp. Equisetum

Conocarpus
spp. 1st 53

801-277-0701 EN

375 3761

John Cronquist

576 Moonbeam St.
Fullerton, Calif.

714-996-7915

Fern

5465 McElsham St.

Sacramento, Calif. 95833

916-455-8037

Valois + Co. 871-D 45-3045

4538

220 1255

Marian

4316 E. Broadway, L. B.

213-433-3703

22803

John Cronquist

516 Moonbeam St.
Fullerton, Calif.

714-996-7915

Fern

5465 McElshon St.
Sacramento, Calif. 95834
916-455-8037

Kaloe + 51-245 3045

Wesley

213-433-3703

Marian

4315 E. Broadway, L.B.

213-433-3703

916-455-8037

49
212 772 41367

39

0.00 - 0.00

39-

2 10

24

25 49 32 nd. Lt.

61 Ring.

noon

Нахружен внес

1-10 445